What is claimed is:

1. A method for preventing or reducing adhesion formation between tissue surfaces in a vertebrate subject, comprising administering to the subject an effective amount of at least one protease inhibitor to a site on a tissue surface for a period of time sufficient to prevent or reduce adhesion formation.

2. A method according to claim 1, wherein said protease inhibitor is an inhibitor of a serine protease.

3. A method according to claim 2, wherein said inhibitor of a serine protease is an inhibitor of a chymotrypsin-like serine protease.

4. A method according to claim 3, wherein said inhibitor of a chymotrypsin-like serine protease is an inhibitor of a chymase.

5. A method according to claim 4, wherein said inhibitor of a chymase is a peptidyl derivative of aryl diesters of α-aminoalkylphosphonic acids.

6. A method according to claim 4, wherein said inhibitor of a chymase is Suc-Val-Pro-Phe^{P}(OPh)$_2$.

7. A method according to claim 4, wherein said inhibitor of a chymase is an enantiomerically enriched preparation of Suc-Val-Pro-Phe^{P}(OPh)$_2$.

8. A method according to claim 7, wherein Suc-Val-Pro-Phe^{P}(OPh)$_2$-A comprises greater than 50% by weight of the total Suc-Val-Pro-Phe^{P}(OPh)$_2$ in said enantiomerically enriched preparation.

9. A method according to claim 7, wherein Suc-Val-Pro-Phe^{P}(OPh)$_2$-A comprises greater than 80% by weight of the total Suc-Val-Pro-Phe^{P}(OPh)$_2$ in said enantiomerically enriched preparation.

10. A method according to claim 7, wherein Suc-Val-Pro-Phe^{P}(OPh)$_2$-A comprises

greater than 95% by weight of the total Suc-Val-Pro-Phe^{P}(OPh)$_2$ in said enantiomerically enriched preparation.

11. A method according to claim 1, wherein said protease inhibitor is administered to said subject before, during or after a surgical procedure.

12. A method according to claim 11, wherein said surgical procedure is an abdominal surgical procedure.

13. A method according to claim 11, wherein said surgical procedure is a thoracic surgical procedure.

14. A method according to claim 11, wherein said surgical procedure is an ophthalmic surgical procedure.

15. A method according to claim 11, wherein said surgical procedure is a cardiac or gynecologic surgical procedure.

16. A method for preventing or reducing postoperative adhesion formation in the peritoneum of a warm-blooded mammal, comprising administering to said mammal an effective amount of at least one serine protease inhibitor to a site on an organ surface for a period of time sufficient to prevent or reduce adhesion formation.

17. A method according to claim 16, wherein said serine protease inhibitor is an inhibitor of a chymotrypsin-like serine protease.

18. A method according to claim 17, wherein said inhibitor of a chymotrypsin-like serine protease is an inhibitor of a chymase.

19. A method according to claim 18, wherein said inhibitor of a chymase is a peptidyl derivative of aryl diesters of α-aminoalkylphosphonic acids.

20. A method according to claim 18, wherein said inhibitor of a chymase is

Suc-Val-Pro-Phe^{P}(OPh)$_2$.

21. A method according to claim 18, wherein said inhibitor of a chymase is an enantiomerically enriched preparation of Suc-Val-Pro-Phe^{P}(OPh)$_2$.

22. A method according to claim 21, wherein Suc-Val-Pro-Phe^{P}(OPh)$_2$-A comprises greater than 50% by weight of the total Suc-Val-Pro-Phe^{P}(OPh)$_2$ in said enantiomerically enriched preparation.

23. A method according to claim 21, wherein Suc-Val-Pro-Phe^{P}(OPh)$_2$-A comprises greater than 80% by weight of the total Suc-Val-Pro-Phe^{P}(OPh)$_2$ in said enantiomerically enriched preparation.

24. A method according to claim 21, wherein Suc-Val-Pro-Phe^{P}(OPh)$_2$-A comprises greater than 95% by weight of the total Suc-Val-Pro-Phe^{P}(OPh)$_2$ in said enantiomerically enriched preparation.

25. A method according to claims 1, wherein said protease inhibitor is administered in conjunction with a delivery vehicle which maintains an effective local concentration of said protease inhibitor at said site, and wherein said delivery vehicle comprises microcapsules or microspheres.

26. A method according to claim 25, wherein said microcapsules or microspheres comprise a biodegradable polymer selected from the group consisting of poly(α-hydroxy acids), polyhydroxybutyric acids, polycaprolactones, polyorthoesters, polyanhydrides, PACA, polycyanoacrylates, poly(D,L-lactide-co-glycolide) and mixtures thereof.

27. A method according to claims 1, wherein said protease inhibitor is administered in conjunction with a delivery vehicle which maintains an effective local concentration of said protease inhibitor at said site, and wherein said delivery

vehicle comprises a film.

28. A method according to claim 27, wherein said film comprise a biodegradable polymer selected from the group consisting of poly(α-hydroxy acids), polyhydroxybutyric acids, polycaprolactones, polyorthoesters, polyanhydrides, PACA, polycyanoacrylates, poly(D,L-lactide-co-glycolide) and mixtures thereof.

29. A method according to claims 1, wherein said protease inhibitor is administered in conjunction with a delivery vehicle which maintains an effective local concentration of said protease inhibitor at said site, and wherein said delivery vehicle comprises liposomes.

30. A method according to claims 1, wherein said protease inhibitor is administered in conjunction with a delivery vehicle which maintains an effective local concentration of said protease inhibitor at said site, and wherein said delivery vehicle comprises a high-molecular weight carrier selected from the group consisting of hyaluronic acid, hydrogels, carboxymethlcellulose, dextrans, cyclodextrans, and mixtures thereof.

31. A method according to claim 1, wherein said vertebrate subject is a human.

32. A method according to claim 16, wherein said warm-blood mammal is a human.

33. A pharmaceutical composition for the prevention of adhesion formation, comprising the protease inhibitor of any one of claims 1-24 and a pharmaceutically acceptable diluent or excipient.

34. A pharmaceutical composition according to claim 33, further comprising a delivery vehicle which maintains an effective local concentration of said protease inhibitor at a site on an tissue surface for a period of time sufficient to prevent or reduce adhesion formation.